

NWS FORM E-19 (COVER)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL WEATHER SERVICE

REPORT ON RIVER GAGE STATION

REVISED, PRINTED DATES: 04/08/2010, 08/22/2010

LOCATION: RIVERDALE  
STREAM: WOOD RIVER  
BASIN: PLATTE 9

HSA: GID

REFERENCES:

FLOOD PLAIN INFORMATION FOR WOOD RIVER AT GRAND ISLAND - AUG 1964  
KEARNEY HUB - NEWSPAPER  
USGS FORM 9-197  
USGS STATION DESCRIPTION - 8/14/1961  
WATER RESOURCES DATA FOR NE - USGS  
WS FORM E-19 - DEC 1981

ABBREVIATIONS:

BM - bench mark	EPA - Environmental Protection Agency
DS - downstream	IBWC - International Boundary and Water Comm.
US - upstream	MSRC - Mississippi River Commission
HW - high water	MORC - Missouri River Commission
LW - low water	NOAA - National Oceanic and Atmospheric Admin.
RB - right bank	NOS - National Ocean Survey
LB - left bank	NWS - National Weather Service
MGL - mean gulf level	TVA - Tennessee Valley Authority
MLW - mean low water	USACE - U.S. Army Corps of Engineers
MSL - mean sea level	USBR - U.S. Bureau of Reclamation
MLT - mean low tide	USGS - U.S. Geological Survey
MT - mean tide	USWB - U.S. Weather Bureau
WQ - water quality	NGVD - National Geodetic Vertical Datum
RM - reference mark	NAD - North American Datum
RP - reference point	

LOCATION IDENTIFICATION: RIVN1  
NWS INDEX NUMBER: 25-7215-8  
USGS NUMBER: 06771000

MAP OF GAGE LOCATION

LATITUDE: 40 47 50  
LONGITUDE: 99 11 50

SOURCE: USGS STATION DESCRIP

LOCATION: WOOD RIVER near RIVERDALE, NE  
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NWS FORM E-19 PAGE 1: GAGE MAP

## BENCHMARKS

ELEVATION OF GAGE ZERO: 2163.800      VERTICAL DATUM: NGVD 1929  
LEVELING AGENCY AND DATE: Level      CHECKBAR: 23.460  
RATING AGENCY: USGS

BENCHMARK	DESCRIPTION	GAGE ZERO	DATUM
RM3	A CHISELED "X" IN RIVET HEAD ON LEFT UPSTREAM CORNER OF HIGHWAY BRIDGE. COULDN'T FIND ON 2010 VISIT. WILL LIKELY HAVE TO COME UP WITH SOME NEW BENCHMARK/REFERENCE MARKS.	19.380	2183.180
RM4	A CHISELED "X" IN THE LEFT DOWNSTREAM PARAPET WALL (CONCRETE CURB). COULDN'T FIND ON 2010 VISIT.	23.540	2187.340
RM5	A CHISELED "X" IN THE RIGHT UPSTREAM CONCRETE CURB. COULDN'T FIND ON 2010 VISIT.	24.180	2187.980

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		GAGES			
DCP				TELEM	
NESS ID:		TYPE OF TELEMETRY:			
OWNER:		OWNER:			
REPORT TIME:		PHONE NUMBER:			
INTERVAL:		INTERVAL:			
		PAYOR/COST OF LINE: / \$			

  

GAGE TYPE	OWNER	MAINTENANCE	BEGAN	ENDED	GAGE LOCATION/REMARKS
tape	USGS	USGS	06/20/1946	08/14/1961	STATION ESTABLISHED BY USGS WITH A-35 RECORDER IN A WELL AND SHELTER OF 48" GALVANIZED CORRUGATED IRON PIPE ATTACHED TO DS END OF FIRST BRIDGE. 10/73 - STATION CONVERTED TO CREST STAGE PARTIAL RECORD STATION...DISCONTINUED IN 1981. ADR IN USE 72-76.
wireweight	NWS	NWS	06/20/1946	04/06/2010	GAGE INSTALLED ON DOWNSTREAM HANDRAIL OF BRIDGE ABOUT 12 FOOT TO LEFT OF SHELTER. 3/1/69 - NWS HIRED OBSERVER TO REPORT HIGH STAGES. WIRE WEIGHT WAS FOUND IN THE RIVER IN APRIL 2010

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# HISTORY

PUBLICATION/LOCATION OF RECORDS	STARTING DATE	ENDING DATE
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WRD NE	06/20/1946	10/01/1973

  

TYPE OF GAGE	OWNER	STARTING DATE	ENDING DATE
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tape	USGS	06/20/1946	08/14/1961
wireweight	NWS	06/20/1946	04/06/2010

  

ZERO ELEVATION	STARTING DATE
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2163.800	06/20/1946

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# CRESTS

FLOOD STAGE: 11.00 ACTION STAGE: 10.00 BANKFULL STAGE: 10.00  
FLOOD FLOW: 1020 ACTION FLOW: 690

DATE OF CREST	TIME LST	CREST (ft)	FLOW (CFS)	FROM HIGH WATERMARKS	BASED ON OLD DATUM	CAUSED BY ICE JAM	REMARKS
06/22/1947	UNDEF	19.75	20000				RECORD FLOOD.
03/17/1948	UNDEF	12.07	1820				
07/20/1958	UNDEF	12.27	1500				
03/25/1960	UNDEF	11.55	1130				
08/13/1961	10:00	7.88	331		X		
06/19/1962	01:30	10.76	845		X		
09/12/1963	UNDEF	5.41	98		X		
05/26/1965	05:30	11.69	1210		X		
06/29/1965	09:00	13.98	2960		X		
02/11/1966	UNDEF	10.75	840		X		THIS WAS DUE TO BACKWATER FROM ICE.
06/05/1967	11:00	11.06	1020				
06/17/1967	07:30	15.54	5280				
06/25/1968	UNDEF	11.15	950				
03/19/1969	UNDEF	10.78	600			X	
06/14/1970	UNDEF	6.17	227				
07/07/1971	UNDEF	4.21	66				
07/28/1972	UNDEF	5.37	156				
01/23/1973	UNDEF	5.08				X	
07/25/1973	UNDEF	4.42	71				
06/16/1974	UNDEF	4.45	78				
06/21/1975	UNDEF	7.83	349				
07/29/1976	UNDEF	4.01	51				
05/26/1977	UNDEF	8.25	450				
03/15/1978	UNDEF	10.95	978			X	
07/27/1979	UNDEF	8.41	475				
02/23/1980	UNDEF	8.43	478			X	

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LOW WATER RECORDS

DATE OF LOW WATER	STAGE (ft)	FLOW (CFS)	REMARKS
06/01/1946	0.00	0	NO FLOW AT TIMES 46, 53-61, 63-73

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CONDITIONS AFFECTING FLOW

MILES ABOVE MOUTH: 56.0      DRAINAGE AREA: 379.0      POOL STAGE: 0.0

STREAM BED: COMPOSED MAINLY OF MUDDY DEPOSITS WITH SAND AND SANDY CLAY.

REACH: A FEW MILES UPSTREAM AND DOWNSTREAM OF GAGE.

REGULATION:

DIVERSION: PART OF WATER IS DIVERTED BY SOME PUMP IRRIGATION.

WINTER: CHANNEL SUBJECT TO FREEZING AND ICE JAMS.

TOPOGRAPHY: HEAVY GROWTH OF TREES ON BOTH BANKS. BANKS ARE FAIRLY HIGH ON BOTH SIDES. HOWEVER, DOWNSTREAM ABOUT 100 FT, THE HIGH STAGE CHANNEL BEGINS TO WIDEN OUT WITH LOWER BANKS.

REMARKS:

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DAMAGE

STAGE      AREAS AFFECTED

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11.00      LOWLAND FLOODING BEGINS. THE TOWN OF RIVERDALE IS NOT SUBJECT TO FLOODING EVEN AT HIGH FLOWS.  
HIGHWAY 40 IS ALSO ABOVE THE FLOOD PLAIN.

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# RIVER STAGE DATA

11.00 - LOWLAND FLOODING BEGINS. THE TOWN OF RIVERDALE IS NOT SUBJECT TO FLOODING EVEN AT HIGH FLOWS. HIGHWAY 40 IS ALSO ABOVE THE FLOOD PLAIN.

22-		
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20-	19.75	06/22/1947
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18-		
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16-	15.54	06/17/1967
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14-	13.98	06/29/1965
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12-	12.27	07/20/1958
-----	11.69	05/26/1965
-----	11.55	03/25/1960
-----	11.15	06/25/1968
-----	10.78	03/19/1969
10-		
-----		
-----		
-----	8.43	02/23/1980
8-	8.25	05/26/1977
-----	7.88	08/13/1961
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-----		
6-	6.17	06/14/1970
-----	5.41	09/12/1963
-----	5.08	01/23/1973
-----	4.45	06/16/1974
4-	4.21	07/07/1971
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REACH: A FEW MILES UPSTREAM AND DOWNSTREAM OF GAGE.

ELEVATION ZERO: 2163.80

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# CONTACTS

SQ	CONTACT/REMARKS	PHONE
1	MARY TRAVIS	308-893-3836
2	WFO GID	402-462-2127
	WFO GID MAINTAINS THE GAUGE.	

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